SRS-Z500/Z500PC

SERVICE MANUAL

Ver. 1.0 1998.9

Photo : SRS-Z500PC

US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model
SRS-Z500/Z500PC
Tourist Model
SRS-Z500

SPECIFICATIONS

Amplifier section

Power output	3 W + 3 W, 10% T.H.D., 500 Hz – 1 kHz, 8 ohms
Input impedance	4.7 kilohms (at 1 kHz)
Input	Stereo mini jack (INPUT)

Speaker section

System	Full-range, bass reflex type
Speaker unit	Magnetically shielded ø 57 mm ($2\ ^1/_4$ inch)
Nominal Impedance	8 ohms
Rated input power	3 W

General

Power requirement	DC IN 9 V jack accepts the supplied Sony AC power adaptor (left speaker only)
Dimensions	Approx. 80 × 145 × 135mm ($3\ ^1/_4 \times 5\ ^3/_4 \times 5\ ^3/_8$ in.) (w/h/d) incl. projecting parts and controls
Mass	Left speaker: Approx. 580 g (1 lb. 4 oz.) Right speaker: Approx. 550 g (1 lb. 3 oz.)
Supplied accessories	AC power adaptor (1) Connecting cord (stereo miniplug ⟷ stereo miniplug) (1)

Design and specifications are subject to change without notice.

STEREO ACTIVE SPEAKER SYSTEM

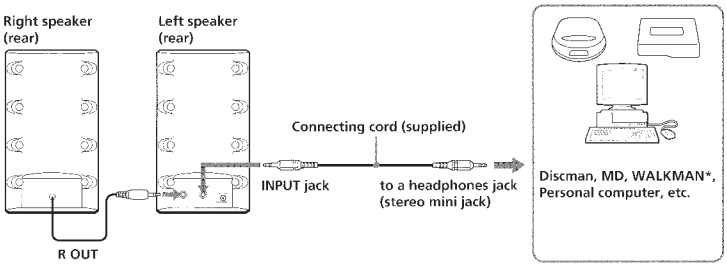
MICROFILM

SONY®

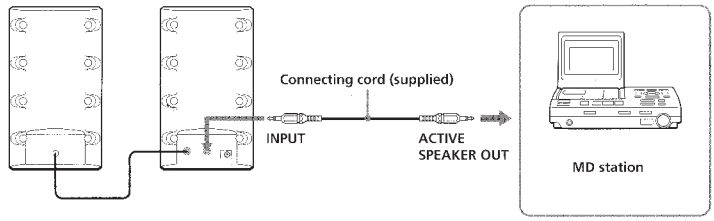
SECTION 1
GENERAL

This section is extracted from instruction manual.

A



B



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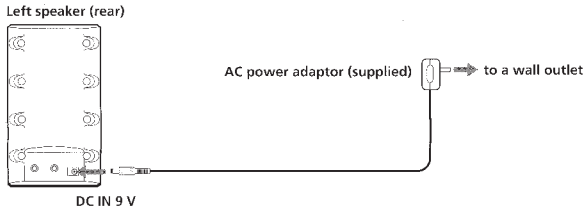
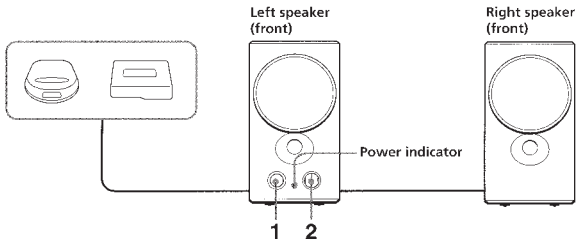


D



Connections
(See fig. A)

Connect the left speaker to the source equipment.

When the system is connected to a monaural jack of a radio, etc., the sound may only come through the left speaker. In such a case, use the optional Sony plug adaptor PC-236HG. The sound will come through both speakers.

To connect to a stereo phone-type headphones jack

Use the optional RK-G138HG connecting cord.

Connecting with an MD station (See fig. B)

Use the INPUT jack on the left speaker when connected to an MD station.

Power Source
(See fig. C)

The mains power source is required when the system is used.

Note on the AC power adaptor

Use only the supplied AC power adaptor. Do not use any other AC power adaptor.

How to Use
(See fig. D)

1 **Turn the POWER switch to turn on the system.**
The POWER indicator lights up.

2 **Adjust the volume with the VOLUME control.**

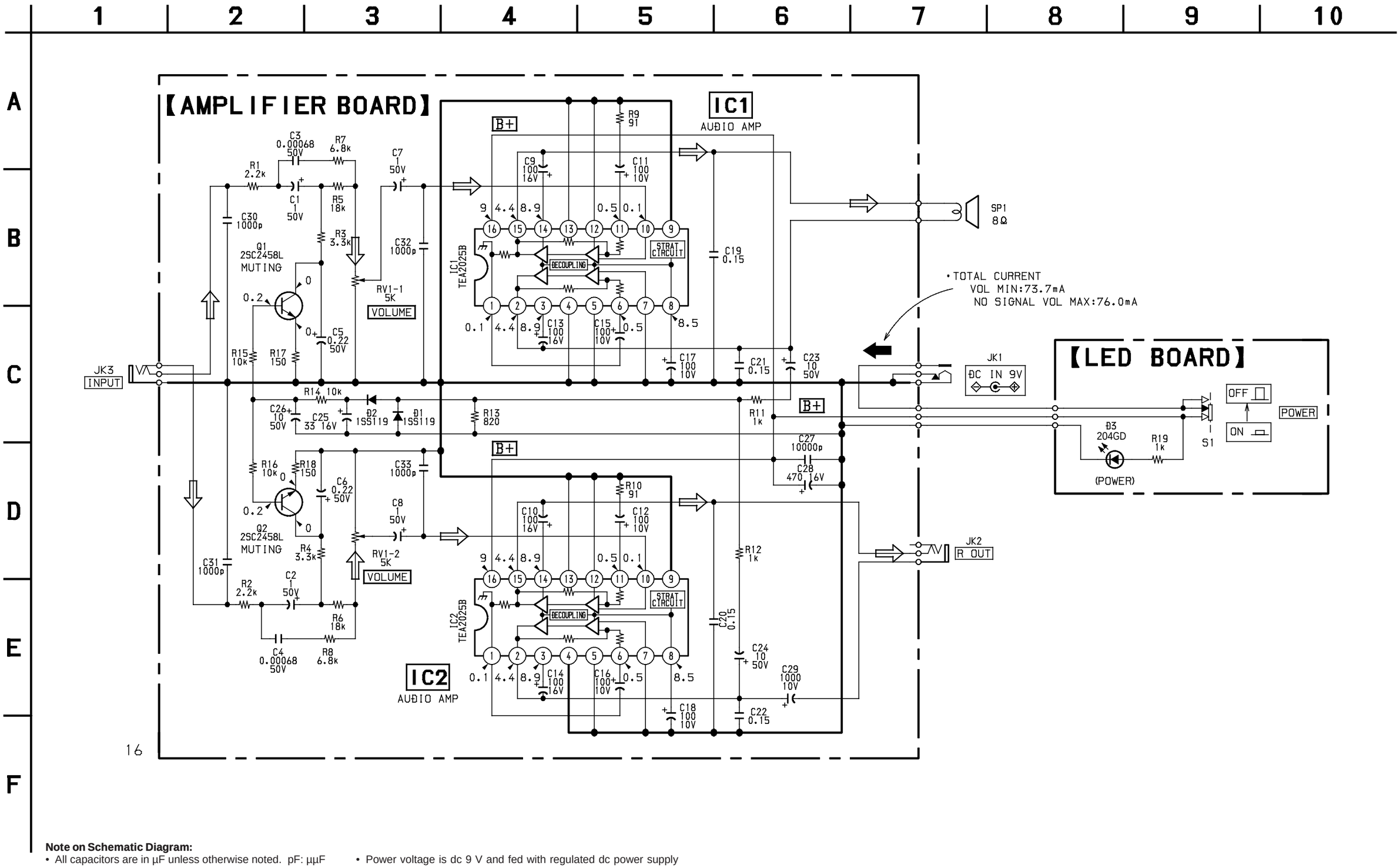
Note

Turn off the MEGA BASS (Walkman) or BASS BOOST (Discman, etc.) function as it may cause sound distortion.

After listening, turn the POWER switch to turn off the system. The POWER indicator goes out.

SECTION 2
DIAGRAMS

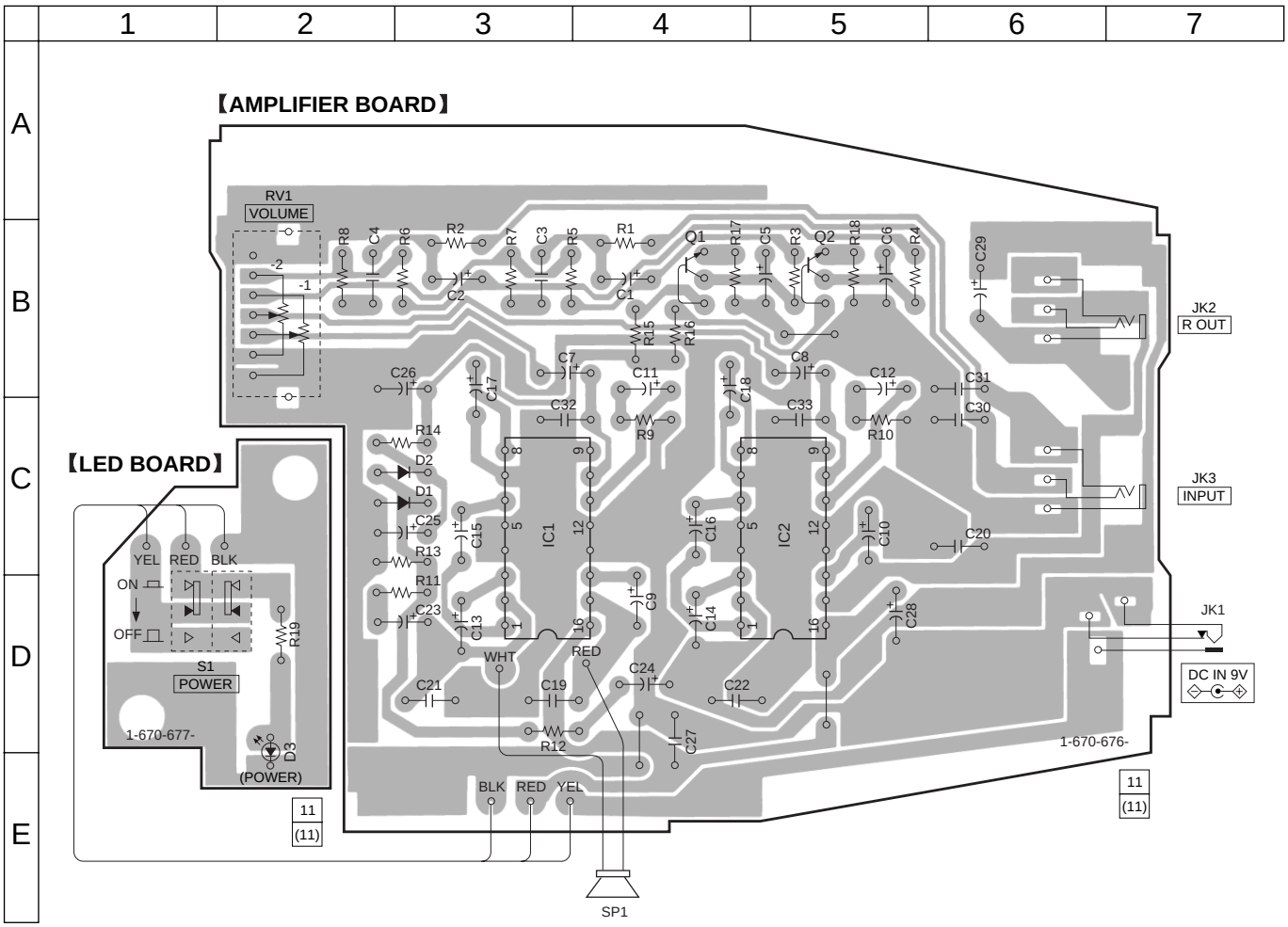
2-1. SCHEMATIC DIAGRAM



Note on Schematic Diagram:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- % : indicates tolerance.
- ▭ : panel designation.
- B+ : B+ Line.
- Power voltage is dc 9 V and fed with regulated dc power supply from external power voltage jack.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : AUDIO

2-2. PRINTED WIRING BOARD



- **Semiconductor Location**

Ref. No.	Location
D1	C-3
D2	C-3
D3	E-2
IC1	C-3
IC2	C-5
Q1	B-4
Q2	B-5

Note on Printed Wiring Board:

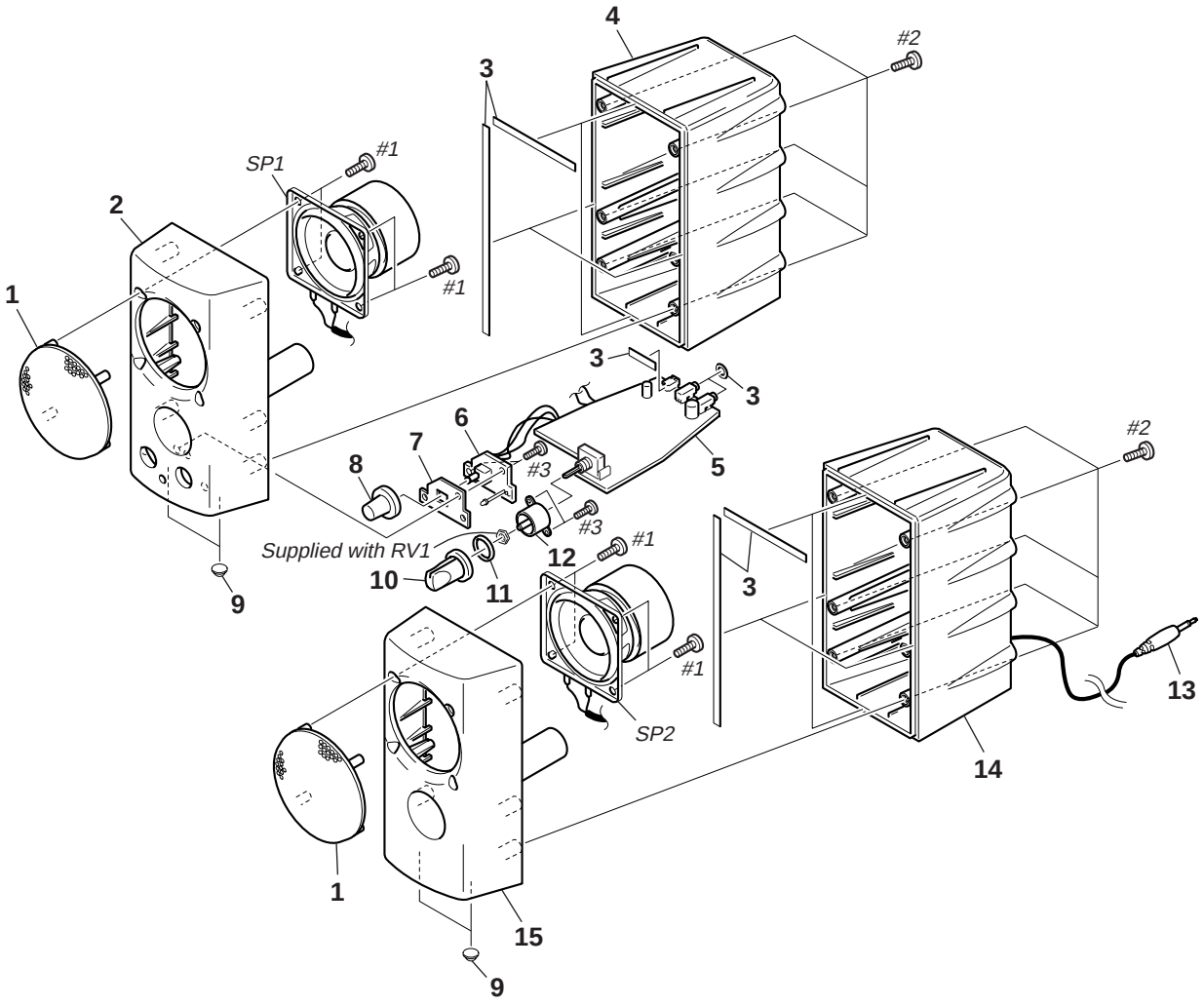
- ○——— : parts extracted from the component side.
- ▒▒▒ : Pattern from the side which enables seeing.

SECTION 3
EXOPLODED VIEW

NOTE:

- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

When indicating parts by reference number, please include the board name.



Ref. No.	Part No.	Description	Remarks
1	X-4950-285-1	GRILLE ASSY (Z500)	
1	X-4950-436-1	GRILLE ASSY (Z500PC)	
2	4-211-620-01	CABINET (L), FRONT (Z500)	
2	4-211-620-11	CABINET (L), FRONT (Z500PC)	
3	3-831-441-99	CUSHION	
4	4-211-621-01	CABINET (L), REAR (Z500)	
4	4-211-621-11	CABINET (L), REAR (Z500PC)	
* 5	A-4542-548-A	AMPLIFIER BOARD,COMPLETE	
* 6	1-670-677-11	LED BOARD	
7	4-213-000-01	CUSHION (LEDM'T)	
8	4-211-625-01	BUTTON (POWER)(Z500)	
8	4-211-625-11	BUTTON (POWER)(Z500PC)	
9	3-740-607-01	CUSHION	

Ref. No.	Part No.	Description	Remarks
10	4-211-627-01	KNOB (VOLUME) (Z500)	
10	4-211-627-11	KNOB (VOLUME) (Z500PC)	
11	4-212-999-01	CUSHION, VOLUME	
12	4-211-624-01	HOLDER, VOLUME	
13	1-769-080-11	CORD (WITH PLUG) (Z500)	
13	1-769-080-31	CORD (WITH PLUG) (Z500PC)	
14	4-211-629-01	CABINET (R), REAR (Z500)	
14	4-211-629-11	CABINET (R), REAR (Z500PC)	
15	4-211-628-01	CABINET (R), FRONT (Z500)	
15	4-211-628-11	CABINET (R), FRONT (Z500PC)	
SP1	1-529-138-11	SPEAKER (057F016)	
SP2	1-529-138-11	SPEAKER (057F016)	

AMPLIFIER **LED**

SECTION 4
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS:
  uF: µF
- RESISTORS
  All resistors are in ohms.
  METAL: metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F: nonflammable
- COILS
  uH: µH
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA...: µA... , uPA... , µPA... ,
  uPB... , µPB... , uPC... , µPC... ,
  uPD..., µPD...

When indicating parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

- Abbreviation
  CND : Canadian AUS : Australian
  SP : Singapore JE : Tourist

Ref. No.	Part No.	Description			Remarks
*	A-4542-548-A	AMPLIFIER BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C1	1-124-903-11	ELECT	1uF	20% 50V	
C2	1-124-903-11	ELECT	1uF	20% 50V	
C3	1-130-469-00	MYLAR	680PF	5% 50V	
C4	1-130-469-00	MYLAR	680PF	5% 50V	
C5	1-126-957-11	ELECT	0.22uF	20% 50V	
C6	1-126-957-11	ELECT	0.22uF	20% 50V	
C7	1-124-903-11	ELECT	1uF	20% 50V	
C8	1-124-903-11	ELECT	1uF	20% 50V	
C9	1-126-933-11	ELECT	100uF	20% 16V	
C10	1-126-933-11	ELECT	100uF	20% 16V	
C11	1-124-443-00	ELECT	100uF	20% 10V	
C12	1-124-443-00	ELECT	100uF	20% 10V	
C13	1-126-933-11	ELECT	100uF	20% 16V	
C14	1-126-933-11	ELECT	100uF	20% 16V	
C15	1-124-443-00	ELECT	100uF	20% 10V	
C16	1-124-443-00	ELECT	100uF	20% 10V	
C17	1-124-443-00	ELECT	100uF	20% 10V	
C18	1-124-443-00	ELECT	100uF	20% 10V	
C19	1-130-497-00	MYLAR	0.15uF	5% 50V	
C20	1-130-497-00	MYLAR	0.15uF	5% 50V	
C21	1-130-497-00	MYLAR	0.15uF	5% 50V	
C22	1-130-497-00	MYLAR	0.15uF	5% 50V	
C23	1-124-907-11	ELECT	10uF	20% 50V	
C24	1-124-907-11	ELECT	10uF	20% 50V	
C25	1-126-966-11	ELECT	33uF	20% 16V	
C26	1-124-907-11	ELECT	10uF	20% 50V	
C27	1-162-306-11	CERAMIC	0.01uF	30% 16V	
C28	1-126-935-11	ELECT	470uF	20% 16V	
C29	1-126-926-11	ELECT	1000uF	20% 10V	
C30	1-162-294-31	CERAMIC	0.001uF	10% 50V	
C31	1-162-294-31	CERAMIC	0.001uF	10% 50V	
C32	1-162-294-31	CERAMIC	0.001uF	10% 50V	
C33	1-162-294-31	CERAMIC	0.001uF	10% 50V	
		< DIODE >			
D1	8-719-911-19	DIODE 1SS119			
D2	8-719-911-19	DIODE 1SS119			
		< IC >			
IC1	8-759-512-88	IC TEA2025B			
IC2	8-759-512-88	IC TEA2025B			

Ref. No.	Part No.	Description			Remarks
		< JACK >			
JK1	1-569-966-11	JACKE, DC (DC IN)			
JK2	1-565-376-31	JACK (R OUT)			
JK3	1-565-376-31	JACK (INPUT)			
		< TRANSISTOR >			
Q1	8-729-205-83	TRANSISTOR 2SC2458L-GR			
Q2	8-729-205-83	TRANSISTOR 2SC2458L-GR			
		< RESISTOR >			
R1	1-249-421-11	CARBON	2.2K	5% 1/4W	F
R2	1-249-421-11	CARBON	2.2K	5% 1/4W	F
R3	1-247-843-11	CARBON	3.3K	5% 1/4W	
R4	1-247-843-11	CARBON	3.3K	5% 1/4W	
R5	1-249-432-11	CARBON	18K	5% 1/4W	
R6	1-249-432-11	CARBON	18K	5% 1/4W	
R7	1-249-427-11	CARBON	6.8K	5% 1/4W	F
R8	1-249-427-11	CARBON	6.8K	5% 1/4W	F
R9	1-247-806-11	CARBON	91	5% 1/4W	
R10	1-247-806-11	CARBON	91	5% 1/4W	
R11	1-249-417-11	CARBON	1K	5% 1/4W	F
R12	1-249-417-11	CARBON	1K	5% 1/4W	F
R13	1-249-416-11	CARBON	820	5% 1/4W	F
R14	1-249-429-11	CARBON	10K	5% 1/4W	
R15	1-249-429-11	CARBON	10K	5% 1/4W	
R16	1-249-429-11	CARBON	10K	5% 1/4W	
R17	1-249-407-11	CARBON	150	5% 1/4W	F
R18	1-249-407-11	CARBON	150	5% 1/4W	F
		< VARIABLE RESISTOR >			
RV1	1-225-673-11	RES, VAR, CARBON 5K/5K (VOLUME)			
		**********			
*	1-670-677-11	LED BOARD			
		**********			
		< LED >			
D3	8-719-073-27	LED 204GD (POWER)			
		< RESISTOR >			
R19	1-249-417-11	CARBON	1K	5% 1/4W	F
		< SWITCH >			
S1	1-771-496-11	SWITCH, PUSH (POWER)			
		**********			

Ref. No.	Part No.	Description	Remarks
		MISCELLANEOUS	
		**********	
13	1-769-080-11	CORD (WITH PLUG) (Z500)	
13	1-769-080-31	CORD (WITH PLUG) (Z500PC)	
SP1	1-529-138-11	SPEAKER (057F016) Z500,Z500PC	
SP2	1-529-138-11	SPEAKER (057F016) Z500,Z500PC	
**********			
		**********	
		HARDWARE LIST	
		**********	
#1	7-685-646-79	SCREW +BVTP 3 × 8 TYPE2 N-S	
#2	7-685-648-79	SCREW +P 3 × 12 TYPE2 NON-SLIT	
#3	7-685-135-19	SCREW +P 2.6 × 10 TYPE2 SLIT	
**********			
		ACCESSORIES & PACKING MATERIALS	
		**********	
⚠	1-467-817-11	ADAPTOR, AC (AC-S911) (US,CND,E)	
⚠	1-467-852-11	ADAPTOR, AC (AUS)	
⚠	1-473-581-11	ADAPTOR, AC (AC-S911) (AEP,SP)	
⚠	1-473-582-11	ADAPTOR, AC (AC-S911) (UK)	
⚠	1-569-008-21	ADAPTOR, CONVERSION 2P (JE)	
⚠	1-693-007-21	ADAPTOR, AC (AC-S195) (JE)	
	3-864-922-21	MANUAL, INSTRUCTION (ENGLISH,GERMAN)	(US)
	3-864-922-31	MANUAL, INSTRUCTION (ENGLISH,FRENCH,GERMAN,SPANISH)	(CND,AEP,UK,E,SP,AUS,JE)
	3-864-922-41	MANUAL, INSTRUCTION (DUTCH,SWEDISH,ITALIAN,POTUGAL,DANISH)	(AEP)

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

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